

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

AIR QUALITY CONTROL MINOR PERMIT

Permit No. AQ0068MSS01

Final – July 08, 2008

The Alaska Department of Environmental Conservation (Department), under the authority of AS 46.14 and 18 AAC 50, issues Air Quality Control Minor Permit No. AQ0068MSS01 to the Permittee listed below.

Permittee: Union Oil Company of California
P.O. Box 196247
Anchorage, AK 99519
907-263-7881

Owner and Operator: Same as Permittee

Stationary Source: King Salmon Platform

Project: Portable Oil and Gas Operation (POGO) Relocation to King Salmon Platform

Location of CFP: 60 Degrees 51 minutes 54 Seconds North; 151 Degrees 36 Minutes 18 Seconds West

Physical Address: Cook Inlet, Alaska

Source Contact: Cynthia Espinoza
(907) 263-7315

Billing Contact: Cynthia Espinoza
P.O. Box 196247
Anchorage, AK 99519
(907) 263-7315

This project is classified under 18 AAC 50.502(c)(2)(A), for a portable oil and gas operation. This permit satisfies the requirements of 18 AAC 50. As required by AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this minor permit. The Permittee may operate under this minor permit upon issuance.

F. Z. Siddiqui for John Kuterbach
John F. Kuterbach
Manager, Air Permits Program

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Section 1 Emission Unit Inventory

- Emission Unit (EU) Authorization.** This permit authorizes the Permittee to install and operate the emission units listed in Table 1. Emission unit descriptions and ratings are given for identification purposes only. Except as noted elsewhere in this permit, the information in Table 1 is for identification purposes only. The specific unit descriptions do not restrict the Permittee from replacing an emission unit identified in Table 1. The Permittee shall comply with all applicable provisions of AS 46.14 and 18 AAC 50 when installing a replacement emission unit, including any applicable minor or construction permit requirements.

Table 1 – Minor Permit Emission Unit Inventory

Emission Unit No.	Unit Identification	Fuel Type	Maximum Capacity
Heaters (that do not qualify as non-road)			
23	Heater 1	FG ^A	2.5 MMBtu/hr
24	Heater 2	Distillate ^B	1.0 MMBtu/hr
25	Heater 3	Distillate	1.0 MMBtu/hr
Non-Road Engines			
26	Pump Engine No. 1	Distillate	785
27	Pump Engine No. 2	Distillate	785
28	Hydraulic PowerPack No. 1	Distillate	630
29	Hydraulic PowerPack No. 2	Distillate	630
30	Heater 6	Distillate	174 hp
31	Heater 7	Distillate	174 hp
32	Heater 8	Distillate	174 hp
33	Heater 9	Distillate	174 hp
34	Heater 10	Distillate	225 hp
35	Heater 11	Distillate	225 hp
36	Heater 12	Distillate	225 hp
37	Heater 13	Distillate	225 hp
38	Heater 14	Distillate	225 hp
39	Heater 15	Distillate	225 hp
40	Hydraulic Power Pack Tongs No. 1	Distillate	88 hp
41	Hydraulic Power Pack Tongs No. 2	Distillate	88 hp
42	Eline "Kit"	Distillate	142 hp
43	Eline "Kit"	Distillate	31 hp
44	Pressure Washer No. 1	Distillate	0.324 MMBtu/hr
45	Pressure Washer No. 2	Distillate	0.324 MMBtu/hr
46	Pressure Washer No. 3	Distillate	0.324 MMBtu/hr
47	Air Compressor	Distillate	29 hp
48	Portable Light Plants	Distillate	50 hp

49	Portable Light Plants	Distillate	50 hp
50	Portable Light Plants	Distillate	50 hp
51	Portable Light Plants	Distillate	50 hp

Table Notes: A -- FG means Fuel Gas
B -- Distillate means DF-1 or DF-2

- Maintenance Requirements.** The Permittee shall conduct maintenance of all fuel burning and related equipment according to the manufacturer's or operator's maintenance procedures.

Section 2 Assessable Emissions

3. Assessable Emissions.

- 3.1 The Permittee shall add the assessable emissions for this permit listed in condition 3.2 to any other assessable emissions for the stationary source.
- 3.2 The Permittee shall pay to the department annual emission fees based on this permit's assessable emissions as determined by the department under 18 AAC 50.410. The assessable emission fee rate is set out in 18 AAC 50.410. The department will assess fees per ton of each air pollutant that the portable oil and gas rig emits or has the potential to emit in quantities greater than 10 tons per year. The quantity for which fees will be assessed is the lesser of:
 - a. This permit's assessable potential to emit of 602 tpy; or
 - b. This permit's projected annual rate of emissions that will occur from July 1 to the following June 30, based upon actual annual emissions emitted during the most recent calendar year or another 12 month period approved in writing by the Department, when demonstrated by:
 - (i) an enforceable test method described in 18 AAC 50.220;
 - (ii) material balance calculations;
 - (iii) emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or
 - (iv) other methods and calculations approved by the Department.

4. Assessable Emission Estimates. Emission fees will be assessed as follows:

- 4.1 no later than March 31 of each year, the Permittee may submit an estimate of this permits's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emissions Estimate, 410 Willoughby Ave., Juneau, AK 99801-1795; the submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the department can verify the estimates; or
- 4.2 if no estimate is received on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set forth in condition 3.2a.

Section 3 State Emission Standards

5. **Visible Emissions.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from any of Emission Units 23 through 25 listed in Table 1 to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes
 - 5.1 For Emission Unit 23 burn only gas as fuel. Verify the initial compliance of Emission Unit 23 with a certification in the first operating report required under Condition 15 that this emission unit fires only gas.
 - 5.2 Verify the initial compliance of Emission Units 24 and 25 by either
 - a. obtaining a certified manufacturer guarantee that the emission unit will comply with the visible emission standard; or
 - b. conducting a Method 9 visible emission source test within 30 days after beginning unit operation.
6. **Particulate Matter (PM).** The Permittee shall not cause or allow PM emitted from any of Emission Units 23 through 25 listed in Table 1 to exceed 0.05 grains per cubic foot (gr./dscf) of exhaust gas corrected to standard conditions and averaged over three hours.
7. **Sulfur Compound Emissions.** The Permittee shall not cause or allow sulfur compound emissions, expressed as SO₂, from any of Emission Units 23 through 25 listed in Table 1 to exceed 500 ppm averaged over three hours. Monitor, record and report fuel sulfur content of fuel used in Emission Units 23 through 25 as described in Condition 5 of Operating Permit No. 68TVP01, Revision 2 dated July 6, 2004.

Section 4 Ambient Air Quality Protection

8. For Emission Units 24 through 51, the Permittee shall use only fuel with a sulfur content of no more than 0.5 percent by weight.
 - a. Monitor, record and report the fuel sulfur content of fuel used in Emission Units 24 through 51 as described in Condition 5 of Operating Permit No. 68TVP01, Revision 2 dated July 6, 2004.
 - b. Report as described in Condition 14 if the fuel sulfur content of the fuel used in Emission Units 24 through 51 exceeds 0.5 percent by weight.
9. For Emission Unit 23, the Permittee shall use only fuel gas with a hydrogen sulfide (H₂S) content of no more than 2000 parts per million volume (ppmv).
 - a. Monitor, record and report the fuel gas H₂S content of fuel gas used in Emission Unit 23 as described in Condition 5 of Operating Permit No. 68TVP01, Revision 2 dated July 6, 2004.
 - b. Report as described in Condition 14 if the H₂S content of fuel gas used in Emission Unit 23 exceeds 2000 ppmv.

Section 5 General Recordkeeping, Reporting, and Certification Requirements

10. **Certification.** The Permittee shall certify all reports, or other documents submitted to the Department and required under the permit by including the signature of a responsible official for the permitted stationary source following the statement: “Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.” Excess emissions reports must be certified either upon submittal or with an operating report required for the same reporting period. All other reports and other documents must be certified upon submittal.
11. **Submittals.** Unless otherwise directed by the Department or this permit, the Permittee shall send two copies of reports, compliance certifications, and other submittals required by this permit to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician. The Permittee may, upon consultation with the Compliance Technician regarding software compatibility, provide electronic copies of data reports, emission source test reports, or other records under a cover letter certified in accordance with Condition 10.
12. **Information Requests.** The Permittee shall furnish to the Department, within a reasonable time, any information the Department requests in writing to determine whether cause exists to modify, revoke, reissue, or terminate the permit or to determine compliance with the permit. Upon request, the Permittee shall furnish to the Department copies of records required to be kept by the permit. The Department may require the Permittee to furnish copies of those records directly to the federal administrator.
13. **Recordkeeping Requirements.** The Permittee shall keep all records required by this permit for at least five years after the date of collection, including:
 - 13.1 copies of all reports and certifications submitted pursuant to this section of the permit; and
 - 13.2 records of all monitoring required by this permit, and information about the monitoring including (if applicable):
 - a. calibration and maintenance records, original strip chart or computer-based recordings for continuous monitoring instrumentation;
 - b. sampling dates and times of sampling or measurements;
 - c. the operating conditions that existed at the time of sampling or measurement;
 - d. the date analyses were performed;
 - e. the location where samples were taken;
 - f. the company or entity that performed the sampling and analyses;
 - g. the analytical techniques or methods used in the analyses; and
 - h. the results of the analyses

14. Excess Emissions and Permit Deviation Reports.

14.1 Except as provided in Condition 17, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

- a. In accordance with 18 AAC 50.240(c), as soon as possible after the event commenced or is discovered, report
 - (i) emissions that present a potential threat to human health or safety; and
 - (ii) excess emissions that the Permittee believes to be unavoidable;
- b. in accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or nonroutine repair that caused emissions in excess of a technology based emissions standard;
- c. report all other excess emissions and permit deviations
 - (i) within 30 days of the end of the month in which emissions or deviation occurs or is discovered, except as provided in Condition 14.1c(ii) and 14.1c(iii);
 - (ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the Department provides written permission to report under Condition 14.1c(i); and
 - (iii) for failure to monitor, as required in other applicable conditions of this permit.

14.2 The Permittee must report using either the Department's on-line form, or if the Permittee prefers, the form contained in Attachment 2. The Permittee must provide all information called for by the form that is used.

14.3 If requested by the Department, the Permittee shall provide a more detailed written report as requested to follow up an excess emissions report.

15. Operating Reports. During the life of this permit, the Permittee shall submit to the Department an original and one copy of an operating report by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year. The Permittee may provide the copy in portable document format (.pdf), MS Word format (.doc), or other computer-readable format approved by the Department.

15.1 The operating report must include all information required to be in operating reports by other conditions of this permit

15.2 If excess emissions or permit deviations that occurred during the reporting period are not reported under 15.1, either

- a. The Permittee shall identify
 - (i) the date of the deviation;

- (ii) the equipment involved;
 - (iii) the permit condition affected;
 - (iv) a description of the excess emissions or permit deviation; and
 - (v) any corrective action or preventative measures taken and the date of such actions; or
 - b. when excess emissions or permit deviations have already been reported under Condition 14 the Permittee may cite the date or dates of those reports.
- 16. The Permittee shall allow the Department or an inspector authorized by the Department upon presentation of credentials and at reasonable times with the consent of the owner or operator to
 - 16.1 enter upon the premises where an emissions unit subject to this permit is located or where records required by the permit are kept;
 - 16.2 have access to and copy any records required by this permit
 - 16.3 inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and
 - 16.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.
- 17. **Air Pollution Prohibited.** No person may permit any emissions which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.
 - 17.1 If emissions present a potential threat to health or safety, the Permittee shall report any such emissions according to Condition 14.
 - 17.2 As soon as practicable after becoming aware of a complaint that is attributable to emissions from the stationary source, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of Condition 17.
 - 17.3 The Permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if
 - a. after investigation because of complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 17; or
 - b. the Department notifies the Permittee that it has found a violation of Condition 17.
 - 17.4 The Permittee shall keep records of
 - a. the date and time, and nature of all emissions complaints received;
 - b. the name of the person or persons that complained, if known;

- c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 17; and
 - d. any corrective actions taken or planned for complaints attributable to emissions from the stationary source.
- 17.5 With each operating report under Condition 15, the Permittee shall include a brief summary report which must include
- a. the number of complaints received
 - b. the number of times the Permittee or the Department found corrective action necessary;
 - c. the number of times action was taken on a complaint within 24 hours; and
 - d. the status of corrective actions the Permittee or Department found necessary that were not taken within 24 hours.
 - e. The Permittee shall notify the Department of a complaint that is attributable to emissions from the stationary source within 24 hours after receiving the complaint, unless the Permittee has initiated corrective action within 24 hours of receiving the complaint.

Section 6 General Stack Test Requirements

18. **Requested Source Tests.** In addition to any source testing explicitly required by this permit, the Permittee shall conduct source testing as requested by the department to determine compliance with applicable permit requirements.
19. **Test Deadline Extension.** The Permittee may request an extension to a source test deadline established by the department. The Permittee may delay a source test beyond the original deadline only if the extension is approved in writing by the department's appropriate division director or designee.
20. **Test Plans.** Except as provided in condition 24, before conducting any source tests, the Permittee shall submit a plan to the department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance, and must specify how the emission unit will operate during the test and how the Permittee will document that operation. The Permittee shall submit a complete plan within 60 days after receiving a request under condition 18 and at least 30 days before the scheduled date of any test unless the department agrees in writing to some other time period. Retesting may be done without resubmitting the plan.
21. **Test Notification.** Except as provided in condition 24, at least 10 days before conducting a source test, the Permittee shall give the department written notice of the date and the time the source test will begin.
22. **Reference Test Methods.** The Permittee shall use the following as reference test methods when conducting source testing for compliance with this permit:
 - 22.1 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(a) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60.
 - 22.2 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(b) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 61.
 - 22.3 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(c) must be conducted in accordance with the source test methods and procedures specified in 40 C.F.R. 63.
 - 22.4 Source testing for the reduction in visibility through the exhaust effluent must be conducted in accordance with the procedures set out in Reference Method 9 and may use the form in Appendix 1 to record data.
 - 22.5 Source testing for emissions of total particulate matter, sulfur compounds, nitrogen compounds, carbon monoxide, lead, volatile organic compounds, fluorides, sulfuric acid mist, municipal waste combustor organics, metals, and acid gases must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60, Appendix A.
 - 22.6 Source testing for emissions of PM-10 must be conducted in accordance with the procedures specified in 40 C.F.R. 51, Appendix M, Methods 201 or 201A and 202.

- 22.7 Source testing for emissions of any pollutant may be determined using an alternative method approved by the department in accordance with 40 C.F.R. 63 Appendix A, Method 301.
23. **Test Reports.** Except as provided in condition 24, within 60 days after completing a source test, the Permittee shall submit two copies of the results in the format set out in the *Source Test Report Outline*, adopted by reference in 18 AAC 50.030. The Permittee shall certify the results in the manner set out in condition 10. If requested in writing by the department, the Permittee must provide preliminary results in a shorter period of time specified by the department.
24. **Test Exemption.** The Permittee is not required to comply with conditions 20, 21, and 23 (Test Plans, Test Notification and Test Reports) when exhaust is observed for visible emissions using Method 9.

Section 7 Terms to Make Permit Enforceable

25. The Permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 18 AAC 50, and, except for those terms or conditions designated in the permit as not federally enforceable, the Clean Air Act, and is grounds for
 - 25.1 an enforcement action; or
 - 25.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280.
26. It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.
27. Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit.
28. Compliance with permit terms and conditions is considered to be compliance with those requirements that are
 - 28.1 included and specifically identified in the permit; or
 - 28.2 determined in writing in the permit to be inapplicable.
29. The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
30. The permit does not convey any property rights of any sort, nor any exclusive privilege.

Section 8 Permit Documentation

February 26, 2008	Permit Application Received by ADEC
April 29, 2008	Revised Emission Unit Inventory Received by ADEC via Email
June 24, 2008	Comments submitted by Cynthia Espinoza of Union Oil Company of California on preliminary decision to approve application.

Attachment 1 Visible Emissions Form

Visible Emissions Field Data Sheet

Certified Observer: _____

Company &
Stationary Source: _____

Location: _____

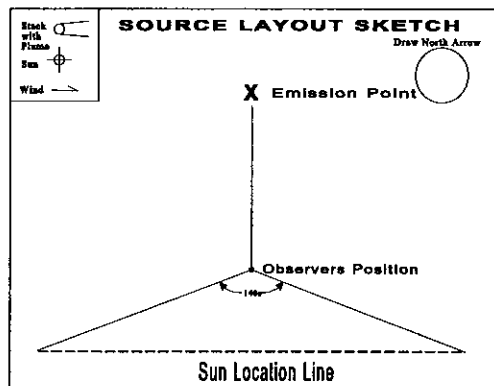
Test No.: _____ Date: _____

Source: _____

Production Rate/Operating Rate: _____

Unit Operating Hours: _____

Hrs. of observation: _____



Clock Time	Initial				Final
Observer location					
Distance to discharge					
Direction from discharge					
Height of observer point					
Background description					
Weather conditions					
Wind Direction					
Wind speed					
Ambient Temperature					
Relative humidity					
Sky conditions: (clear, overcast, % clouds, etc.)					
Plume description:					
Color					
Distance visible					
Water droplet plume? (Attached or detached?)					
Other information					

Page ____ of ____

Test Number _____ Clock time _____

Set Number	Time Start—End	Opacity	
		Sum	Average

Attachment 2 - ADEC Notification Form¹

Excess Emissions and Permit Deviation Reporting
State of Alaska Department of Environmental Conservation
Division of Air Quality

Stationary Source Name

Air Quality Permit Number

Company Name

When did you discover the Excess Emissions/Permit Deviation?

Date: / / Time: :

When did the event/deviation?

Begin: Date: / / Time: : (please use 24hr clock)

End: Date: / / Time: : (please use 24hr clock)

What was the duration of the event/deviation: : (hrs:min) or days
(total # of hrs, min, or days, if intermittent then include only the duration of the actual emissions/deviation)

Reason for notification: (please check only 1 box and go to the corresponding section)

☐ Excess Emissions Complete Section 1 and Certify

☐ Deviation from permit conditions complete Section 2 and certify

☐ Deviation from COBC, CO, or Settlement Agreement Complete Section 2 and certify

Section 1. Excess Emissions

(a) Was the exceedance ☐ Intermittent or ☐ Continuous

(b) Cause of Event (Check one that applies):

☐ Start Up/Shut Down

☐ Natural Cause (weather/earthquake/flood)

☐ Control Equipment Failure

☐ Scheduled Maintenance/Equipment Adjustments

☐ Bad fuel/coal/gas

☐ Upset Condition

☐ Other

(c) Description

Describe briefly what happened and the cause. Include the parameters/operating conditions exceeded, limits, monitoring data and exceedance.

(d) Emission unit(s) Involved:

Identify the emission units involved in the event, using the same identification number and name as in the permit. Identify each emission standard potentially exceeded during the event and the exceedance.

¹ Revised as of December 6, 2004

<u>EU ID</u>	<u>Emission Unit Name</u>	<u>Permit Condition Exceeded/Limit/Potential Exceedance</u>

(e) Type of Incident (please check only one):

- ☐ Opacity % ☐ Venting (gas/scf) ☐ Control Equipment Down
☐ Fugitive Emissions ☐ Emission Limit Exceeded ☐ Record Keeping Failure
☐ Marine Vessel Opacity ☐ Failure to monitor/report ☐ Flaring
☐ Other:

(f) Unavoidable Emissions:

Do you intend to assert that these excess emissions were unavoidable?

☐ YES

☐ NO

Do you intend to assert the affirmative defense of 18 AAC 50.235?

☐ YES

☐ NO

Certify Report (go to end of form)

Section 2. Permit Deviations

(a) Permit Deviation Type (check one only) (check boxes correspond with sections in permit)

- ☐ Emission Unit Specific
☐ General Source Test/Monitoring Requirements
☐ Recordkeeping/Reporting/Compliance Certification
☐ Standard Conditions Not Included in Permit
☐ Generally Applicable Requirements
☐ Reporting/Monitoring for Diesel Engines
☐ Insignificant Emission Unit
☐ Stationary Source-Wide
☐ Other Section: (title of section and section # of your permit)

(b) Emission unit(s) Involved:

Identify the emission unit involved in the event, using the same identification number and name as in the permit. List the corresponding Permit condition and the deviation.

<u>EU ID</u>	<u>Emission Unit Name</u>	<u>Permit Condition /Potential Deviation</u>

(c) Description of Potential Deviation: Describe briefly what happened and the cause. Include the parameters/operating conditions and the potential deviation.

(d) Corrective Actions: Describe actions taken to correct the deviation or potential deviation and to prevent future recurrence.

Certification:

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name: _____ Title _____ Date _____

Signature: _____ Phone number _____

To Submit this report:

Fax this form to: 907-451-2187

Or

Email to: airreports@dec.state.ak.us

if emailed, the report must be certified.

Or

Mail to: ADEC
 Air Permits Program
 610 University Avenue
 Fairbanks, AK 99709-3643

Or

Phone notifications: 907-451-5173.

Phone notifications require written follow up report within the deadline listed in condition 24.

Or

Online submission of this report can be made at the following website (*Website is not yet available*). *If submitted online, the report must be certified.*

Signature: